

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P243239

Luminaire Tested: **S122RDR-H675D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243239  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-63)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S122RDR-H675D935-X4F0-XX-UDD-F-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

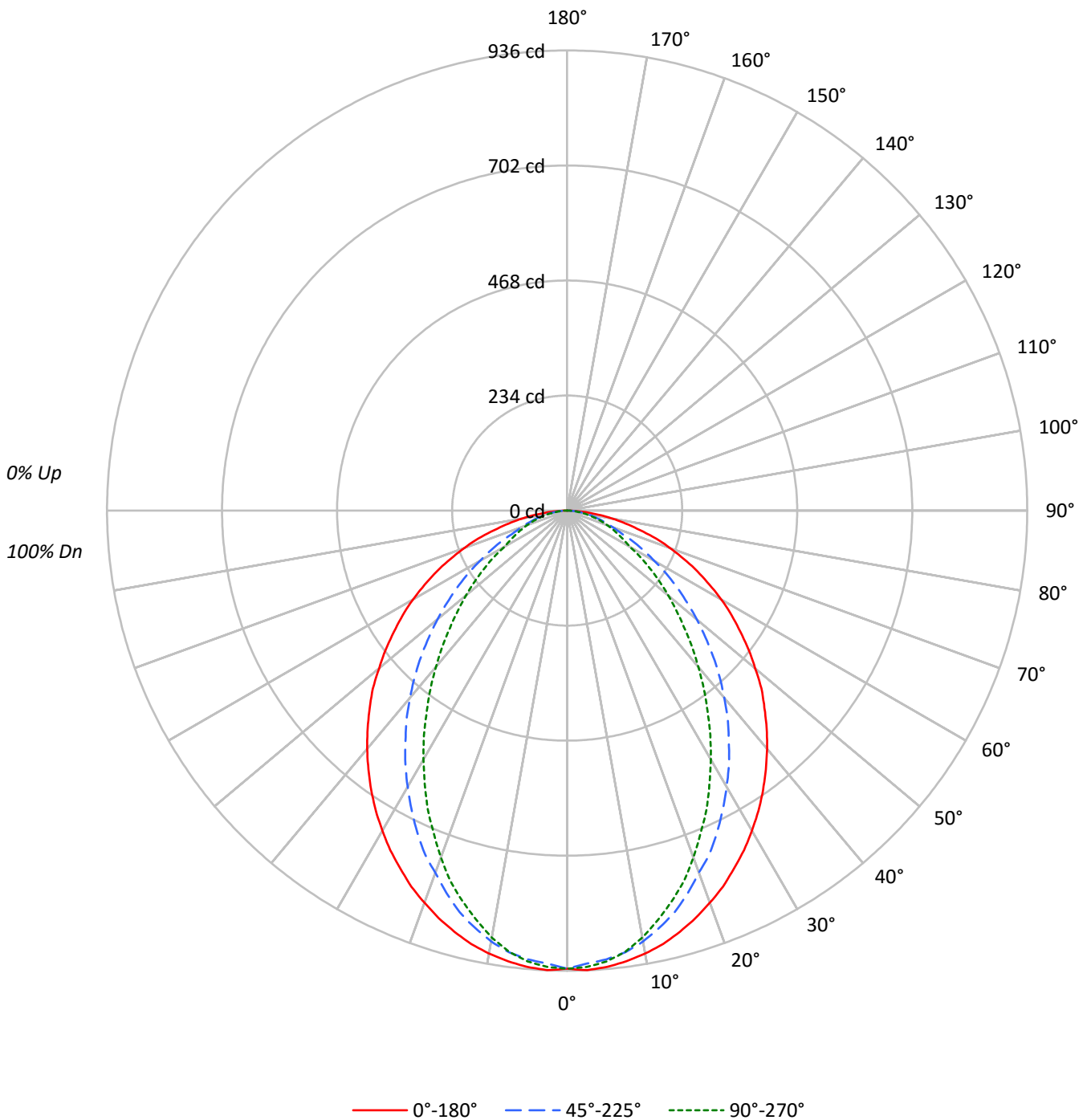
Lumens per Lamp: N/A  
Luminaire Lumens: 1910.8 lumens  
Efficiency: N/A  
Efficacy: 81.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.15' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P243239

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-F-W

### Luminous Intensity Polar Plot





TEST NUMBER: P243239

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-F-W

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17747	17747	17747
5°	17815	17522	17600
10°	17694	17212	17057
15°	17485	16677	16217
20°	17207	15888	15219
25°	16879	15172	14092
30°	16531	14268	12854
35°	16152	13329	11571
40°	15732	12353	10314
45°	15290	11325	9073
50°	14793	10197	7956
55°	14283	9076	6861
60°	13813	7810	5604
65°	13188	6594	5183
70°	12403	5463	4834
75°	11297	4968	4438
80°	10135	4410	3971
85°	8436	3693	3519



TEST NUMBER: P243239

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-F-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.3	4.6
10°-20°	239.2	12.5
20°-30°	335.5	17.6
30°-40°	365.4	19.1
40°-50°	335.9	17.6
50°-60°	263.6	13.8
60°-70°	172.0	9.0
70°-80°	88.9	4.7
80°-90°	23.0	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	661.9	34.6
0°-40°	1027.4	53.8
0°-60°	1626.9	85.1
0°-90°	1910.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1910.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	932	927	916	923	920	88
15°	887	876	846	829	822	250
25°	803	775	722	686	670	370
35°	695	649	573	520	498	434
45°	568	510	420	359	337	438
55°	430	366	273	222	207	385
65°	293	222	146	119	115	289
75°	154	96	68	62	60	164
85°	39	18	17	16	16	45
90°	0	0	0	0	0	



TEST NUMBER: P243239

CATALOG NUMBER: S122RDR-H675D935-X4F0-XX-UDD-F-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	931.7	931.7	931.7	931.7	931.7
2.5°	935.7	931.7	922.1	930.9	929.3
5°	931.7	926.9	916.4	922.9	920.5
7.5°	924.5	919.7	906.0	909.2	905.2
10°	914.8	908.4	889.9	886.7	881.9
12.5°	902.8	893.9	869.0	859.4	852.9
15°	886.7	876.2	845.7	828.8	822.4
17.5°	869.0	853.7	816.0	796.7	790.2
20°	848.9	831.2	783.8	763.7	750.8
22.5°	828.0	805.5	756.5	725.1	709.8
25°	803.1	775.0	721.9	686.5	670.5
27.5°	779.0	746.0	685.7	644.7	627.0
30°	751.6	715.5	648.7	601.3	584.4
32.5°	724.3	682.5	612.6	561.1	541.8
35°	694.6	648.7	573.2	520.1	497.6
37.5°	664.0	616.6	537.0	478.3	456.6
40°	632.7	579.6	496.8	435.7	414.8
42.5°	600.5	546.7	459.0	396.3	376.2
45°	567.6	509.7	420.4	359.3	336.8
47.5°	536.2	473.5	381.0	323.2	301.5
50°	499.2	437.3	344.1	285.4	268.5
52.5°	465.5	401.1	307.9	251.6	237.1
55°	430.1	365.8	273.3	221.9	206.6
57.5°	397.1	328.8	238.8	192.1	177.7
60°	362.6	293.4	205.0	162.4	147.1
62.5°	326.4	257.2	175.2	135.1	130.2
65°	292.6	221.9	146.3	119.0	115.0
67.5°	256.4	188.9	116.6	104.5	100.5
70°	222.7	156.8	98.1	89.2	86.8
72.5°	189.7	126.2	82.8	75.6	73.2
75°	153.5	95.7	67.5	61.9	60.3
77.5°	122.2	67.5	53.9	49.8	48.2
80°	92.4	49.0	40.2	37.8	36.2
82.5°	63.5	33.0	28.1	26.5	25.7
85°	38.6	18.5	16.9	16.1	16.1
87.5°	15.3	7.2	7.2	6.4	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)